

## Supplementary Online Content

Mundt AP, Chow WS, Arduino M, et al. Psychiatric hospital beds and prison populations in South America since 1990: does the Penrose hypothesis apply? *JAMA Psychiatry*. Published online December 3, 2014. doi:10.1001/jamapsychiatry.2014.2433.

**eAppendix.** Country-specific details

**eReferences.**

**eFigure.** Gini Index in South America

This supplementary material has been provided by the authors to give readers additional information about their work.

## Online-only supplementary material

### eAppendix

#### Country-specific details

**Argentina:** The census of psychiatric bed capacities was conducted in 1995.<sup>1</sup> The second data point was retrieved from the WHO Mental Health Atlas from 2005 and based on a telephone survey. The data point 2012 is from a registry of the Ministry of Health of the Republic of Argentina. All public and private hospital beds had to be re-registered in this year. Therefore, the central government possesses a complete count for this year. For the other years national bed counts were not conducted and data were not available. Psychiatric bed numbers include private and public psychiatric hospital beds. Data on prison populations were retrieved from the annual report of the Ministry of Justice and Human Rights of the Republic of Argentina on the statistics of the penal justice system. No data were available for the time span between 1984 and 1995.

**Bolivia:** The numbers of psychiatric hospital beds were retrieved from different sources. The data point 1999 stems from the Ministry of Health and Social Care of the Republic of Bolivia; data point 1997 was retrieved from an international peer reviewed scientific publication;<sup>2</sup> data points 2005 and 2008 were from WHO publications. Prison population rates were retrieved from the National Prison Administration through the National Institute for Statistics.

**Brazil:** Psychiatric bed counts from 1992-2002 were retrieved from the Department of Information of the Ministry of Health (<http://tabnet.datasus.gov.br/cgi/deftohtm.exe?sih/cnv/cxuf.def>; accessed 08/02/2013). Data on the number of psychiatric hospital beds from 2003 onwards were retrieved from the National Register of Health Establishments of the Ministry of Health (Cadastro Nacional de Estabelecimento de Saúde CNES; <http://cnes.datasus.gov.br/>; accessed 10.01.2014). Data on the prison population from the year 2000 onwards were retrieved from the National Penitentiary Department of the Ministry of Justice. Prison population rates before the year 2000 were retrieved from the International Center for Prison Studies.

**Chile:** Estimates of psychiatric hospital bed numbers were based on data collected by the Ministry of Health. The bed counts did not include the private sector. The 2005 data point only was based on WHO estimates. Statistics on bed capacities in the private sector were unavailable. The Ministry of Justice provided prison population counts based on statistics of the national prison administration (Gendarmería de Chile).

**Paraguay:** Estimations of psychiatric bed capacities were based on a census with the directors of each institution in the country and with the Ministry of Health. The bed count included private institutions. Starting with the year

2001 the number was based on the actual mean daily occupancy in the largest psychiatric institution taking into account that the number of beds does not necessarily reflect the occupancy with patients in psychiatric institutions, thereby providing a more accurate count of people actually institutionalized in mental hospitals.

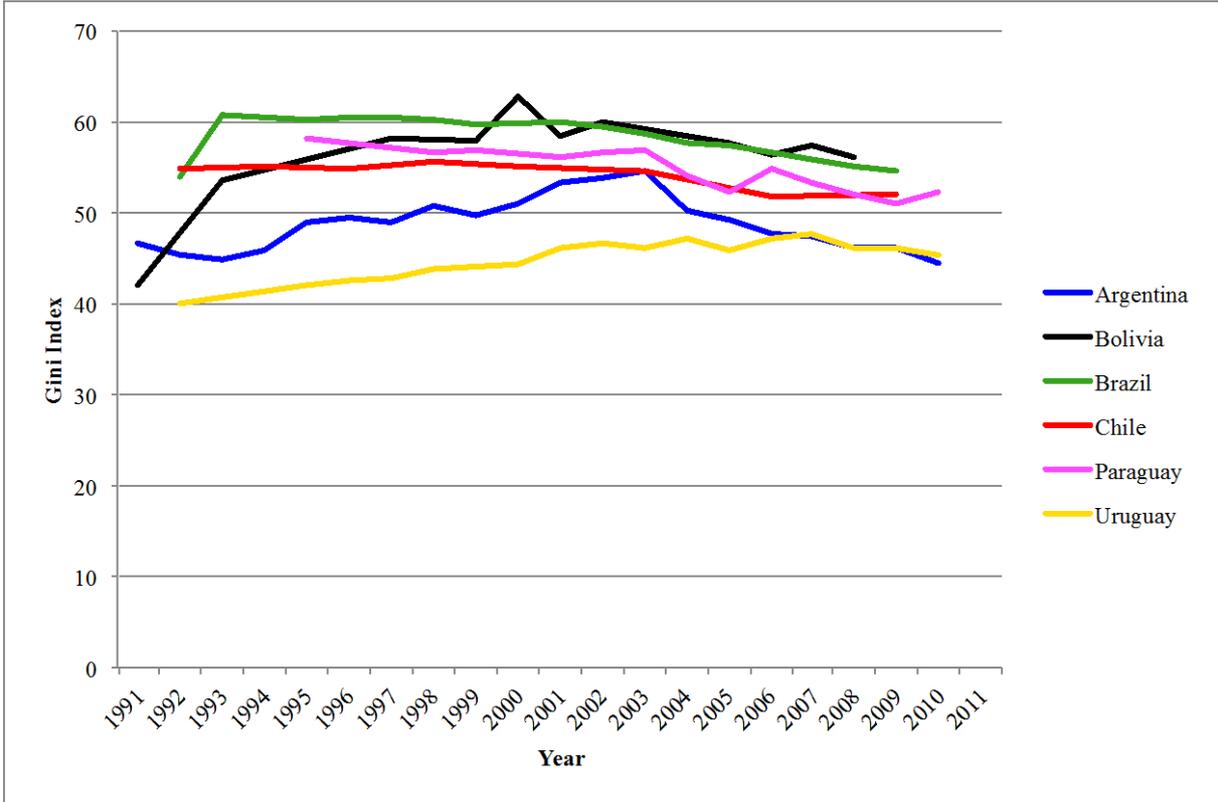
Prison population rates were retrieved from the national prison administration.

**Uruguay:** Psychiatric bed numbers for the public sector were retrieved from the Ministry of Health. The numbers of psychiatric beds in the private sector were based on a telephone census. Psychiatric bed counts included the Vilardebó Hospital, the 'Colonias asistenciales' that serve the chronically mentally ill and the private sector. Prison population rates were based on online data provided by the International Centre of Prison Studies.

## **References**

1. Barrionuevo H. *Gestión del Programa Médico Obligatorio en Salud Mental*. Buenos Aires: Ediciones ISALUD; 2004.
2. Larrobla C, Botega NJ. Psychiatric care policies and deinstitutionalization in South America. *Actas Esp Psiquiatr*. 2000;28(1):22-30.

eFigure. Gini Index in South America



The Gini index showed high levels of income inequality for all countries moderately increasing in the first decade and decreasing in the second decade studied.